

$\frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{4}$ $\frac{1}{5}$ $\frac{1}{6}$ $\frac{1}{7}$ $\frac{1}{8}$ $\frac{1}{9}$ $\frac{1}{10}$ $\frac{1}{11}$ $\frac{1}{12}$ $\frac{1}{13}$ $\frac{1}{14}$ $\frac{1}{15}$ $\frac{1}{16}$ $\frac{1}{17}$ $\frac{1}{18}$ $\frac{1}{19}$ $\frac{1}{20}$ $\frac{1}{21}$ $\frac{1}{22}$ $\frac{1}{23}$ $\frac{1}{24}$ $\frac{1}{25}$ $\frac{1}{26}$ $\frac{1}{27}$ $\frac{1}{28}$ $\frac{1}{29}$ $\frac{1}{30}$ $\frac{1}{31}$ $\frac{1}{32}$ $\frac{1}{33}$ $\frac{1}{34}$ $\frac{1}{35}$ $\frac{1}{36}$ $\frac{1}{37}$ $\frac{1}{38}$ $\frac{1}{39}$ $\frac{1}{40}$ $\frac{1}{41}$ $\frac{1}{42}$ $\frac{1}{43}$ $\frac{1}{44}$ $\frac{1}{45}$ $\frac{1}{46}$ $\frac{1}{47}$ $\frac{1}{48}$ $\frac{1}{49}$ $\frac{1}{50}$ $\frac{1}{51}$ $\frac{1}{52}$ $\frac{1}{53}$ $\frac{1}{54}$ $\frac{1}{55}$ $\frac{1}{56}$ $\frac{1}{57}$ $\frac{1}{58}$ $\frac{1}{59}$ $\frac{1}{60}$ $\frac{1}{61}$ $\frac{1}{62}$ $\frac{1}{63}$ $\frac{1}{64}$ $\frac{1}{65}$ $\frac{1}{66}$ $\frac{1}{67}$ $\frac{1}{68}$ $\frac{1}{69}$ $\frac{1}{70}$ $\frac{1}{71}$ $\frac{1}{72}$ $\frac{1}{73}$ $\frac{1}{74}$ $\frac{1}{75}$ $\frac{1}{76}$ $\frac{1}{77}$ $\frac{1}{78}$ $\frac{1}{79}$ $\frac{1}{80}$ $\frac{1}{81}$ $\frac{1}{82}$ $\frac{1}{83}$ $\frac{1}{84}$ $\frac{1}{85}$ $\frac{1}{86}$ $\frac{1}{87}$ $\frac{1}{88}$ $\frac{1}{89}$ $\frac{1}{90}$ $\frac{1}{91}$ $\frac{1}{92}$ $\frac{1}{93}$ $\frac{1}{94}$ $\frac{1}{95}$ $\frac{1}{96}$ $\frac{1}{97}$ $\frac{1}{98}$ $\frac{1}{99}$ $\frac{1}{100}$

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF: :

BOIRE PHILIPPE ET AL : ATTN: APPLICATION DIVISION

SERIAL NO: NEW APPLICATION :

FILED: HEREWITH :

FOR: SUBSTRATE WITH A
PHOTOCATALYTIC COATING

PRELIMINARY AMENDMENT

ASSISTANT COMMISSIONER FOR PATENTS
WASHINGTON, D.C. 20231

SIR:

Prior to examination on the merits, please amend the above-identified application as follows:

IN THE CLAIMS

Please cancel Claims 1-24, and replace with new Claims 25-43 as follows:

25. (New) A coated substrate which is a glass, ceramic or vitroc ceramic substrate provided on at least a portion of one of its faces with a coating having photocatalytic properties, and comprising titanium oxide at least partly crystallized in the anatase form, and obtained by thermal decomposition of titanium precursors selected from the group consisting of organo-metallic precursors and metallic halide precursors, wherein said coating has a

211827US0CONT

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF: :
BOIRE PHILIPPE ET AL : GROUP ART UNIT: 1775
SERIAL NO: 09/923,353 :
FILED: AUGUST 8, 2001 : EXAMINER:
FOR: SUBSTRATE WITH A :
PHOTOCATALYTIC COATING :

3/B
KWO
10-18-01

SUPPLEMENTAL PRELIMINARY AMENDMENT

ASSISTANT COMMISSIONER FOR PATENTS
WASHINGTON, D.C. 20231

SIR:

Supplemental to the Preliminary Amendment filed August 8, 2001, and prior to
examination on the merits, please amend the above-identified application as follows:

IN THE CLAIMS

Please add the following new Claims 44-46 as follows:

44. (New) A coated substrate which is a glass, ceramic or vitroceraic substrate
provided on at least one of its faces with a coating with hydrophilic and/or photocatalytic
properties, containing titanium oxide and doped by at least one metal selected from the group
consisting of Nb, Ta, Fe, Bi, Co, Ni, Cu, Rh, Ce, and Mo.

45. (New) The coated substrate according to claim 44, wherein the coating
deposited by reactive or non-reactive cathodic sputtering.

RECEIVED
SEP 25 2001
TECHNOLOGY CENTER 1700

B1

B1
Cont 46. (New) A coated substrate which is a glass, ceramic or vitroc ceramic substrate provided on at least one of its faces with a coating with hydrophilic and/or photocatalytic properties, containing titanium oxide and deposited by non-reactive cathodic sputtering.

DISCUSSION OF THE AMENDMENT

New Claims 44-46 have been added. Claims 44 and 45 are supported by original Claim 7, and the specification at page 5, lines 11-16, together with page 3, lines 36-37. Claim 46 is supported in the specification at page 3, lines 36-37, combined with page 6, line 13, and page 1, lines 6-7.

No new matter has been added by the above amendment. Claims 25-46 are now pending in the application.